

Exhibit No.:
Issues: Demand-Side Resources
Witness: Randy S. Gross
Sponsoring Party: MO PSC Staff
Type of Exhibit: Rebuttal Testimony
File No.: EO-2011-0271
Date Testimony Prepared: October 28, 2011

Filed
January 6, 2012
Data Center
Missouri Public
Service Commission

MISSOURI PUBLIC SERVICE COMMISSION

REGULATORY REVIEW DIVISION

REBUTTAL TESTIMONY

OF

RANDY S. GROSS

UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI

FILE NO. EO-2011-0271

*Jefferson City, Missouri
October 2011*

Staff Exhibit No. 15
Date 12/15/11 Reporter JMB
File No. EO-2011-0271

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

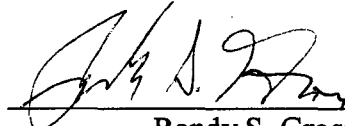
In the Matter of Union Electric Company's)
2011 Utility Resource Filing Pursuant to)
4 CSR 240 - Chapter 22)

File No. EO-2011-0271

AFFIDAVIT OF RANDY S. GROSS

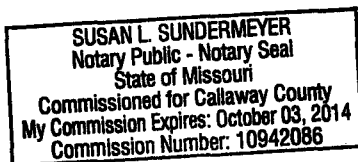
STATE OF MISSOURI)
) ss
COUNTY OF COLE)

Randy S. Gross, of lawful age, on his oath states: that he has participated in the preparation of the following Rebuttal Testimony in question and answer form, consisting of 5 pages of Rebuttal Testimony to be presented in the above case, that the answers in the following Rebuttal Testimony were given by him; that he has knowledge of the matters set forth in such answers; and that such matters are true to the best of his knowledge and belief.



Randy S. Gross

Subscribed and sworn to before me this 27th day of October, 2011.





Notary Public

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25
26

REBUTTAL TESTIMONY

OF

RANDY S. GROSS

UNION ELECTRIC COMPANY d/b/a AMEREN MISSOURI

FILE NO. EO-2011-0271

Q. Please state your name and business address.

A. My name is Randy S. Gross, and my business address is Missouri Public Service Commission, P. O. Box 360, Jefferson City, Missouri 65102.

Q. What is your present position at the Missouri Public Service Commission?

A. I am an Engineer in the Energy Unit of the Regulatory Review Division.

Q. Are you the same Randy S. Gross that contributed to Staff's Report on Electric Utility Resource Planning Compliance Filing ("Report") filed on June 23, 2011, in this case?

A. Yes, I am.

Q. Would you please summarize the purpose of your rebuttal testimony?

A. I address certain responses of Union Electric Company d/b/a Ameren Missouri ("Ameren Missouri" or "Company") to the deficiencies and concerns identified by Staff filed by Ameren Missouri on September 15, 2011¹ related to its analysis of demand-side resources described in its 4 CSR 240-22 Electric Utility Resource Planning compliance filing² ("Resource Plan Filing").

Q. What did Staff identify as Deficiency 1?

¹ Ameren Missouri Response, Case No. ER-2011-0271, item 78

² Electric Utility Resource Filing of Union Electric Company d/b/a Ameren Missouri, File No. EO-2011-0271, item 3

Rebuttal Testimony of
Randy S. Gross

1 A. Staff's identified Deficiency 1 is that Ameren Missouri did not perform cost-
2 effectiveness screening for a modified Rider L program or for potential customer education
3 programs provided by third party providers such as OPOWER.³

4 Q. Did Ameren Missouri address this identified deficiency in its September 15,
5 2011, response?

6 A. Yes. Ameren Missouri acknowledged that it did not perform a cost
7 effectiveness screening for the OPOWER customer education program.⁴

8 Q. What justification does Ameren Missouri provide for not performing a cost-
9 effectiveness screening for the OPOWER program?

10 A. Ameren Missouri states that "Since the Opower program was not identified
11 pursuant to 4 CSR 240-22.050(1),⁵ it cannot be subjected to a cost-effectiveness evaluation."⁶

12 Q. Does Staff agree with Ameren Missouri's justification for not evaluating
13 OPOWER or a similar program?

14 A. No. 4 CSR 240-22.050(1) requires the electric utility to identify a wide menu
15 of end-use measures to screen. Ameren Missouri's justification that it did not screen the
16 OPOWER program because it wasn't identified by Ameren Missouri pursuant to 4 CSR 240-
17 22.050(1) does not address Ameren Missouri's failure to include OPOWER. It just identifies
18 that Ameren Missouri was also deficient in the menu of identified end-use measure it
19 developed pursuant to 4 CSR 240-22.050(1).

20 Q. Was the OPOWER program known by and available to Ameren Missouri prior
21 to this Resource Plan Filing?

³ Staff Report, Case No. EO-2011-0271, item 65, page 19.

⁴ Ameren Missouri Response, Case No. ER-2011-0271, item 78, pages 22 and 23.

⁵ All references to 4 CSR 240-22.050 in this testimony are to the version that was in effect when Ameren Missouri filed in February 2011.

⁶ Ameren Missouri Response, Case No. ER-2011-0271, item 78, page 23.

Rebuttal Testimony of
Randy S. Gross

1 A. Yes. Ameren Missouri acknowledges that Ameren Missouri's affiliate electric
2 distribution company, Ameren Illinois, is implementing a pilot program with OPOWER in
3 2011.⁷ In addition, as stated in Staff's report, OPOWER provided a presentation during
4 Staff's Smart Grid Workshop that Ameren Missouri attended on June 28, 2010, that was
5 submitted in File No. EW-2009-0292.⁸ Ameren Missouri was aware of this program prior to
6 its Resource Plan Filing and therefore should have identified it as one of the end-use measures
7 pursuant to 4 CSR 240-22.050(1) and performed a cost-effectiveness screening pursuant to
8 4 CSR 240-22.050(3).

9 Q. Does Ameren Missouri provide any other justification for not performing a
10 cost- effectiveness screening for the OPOWER program?

11 A. Ameren Missouri states that "The OPower Program is in its infancy. Little is
12 known about the performance of the program over a reasonable period of years. Behavior
13 change is especially difficult to model because over time what now may be considered a
14 change in typical behavior might eventually become the norm."⁹

15 Q. Does Staff agree with this justification for not evaluating the OPOWER
16 program?

17 A. No. Even if Staff were to agree that the OPOWER program is in its infancy,
18 every demand-side program is at some point in time in its infancy. The development of utility
19 specific information regarding a particular program comes from pilot programs. Ameren
20 Missouri has previously utilized pilot programs to harvest input data used for developing
21 programs.

⁷ Ameren Missouri Response, Case No. ER-2011-0271, item 78, page 23.

⁸ Sandeep Menon OPOWER presentation, File No. EW-2009-0292, item 102.

⁹ Ameren Missouri Response, Case No. ER-2011-0271, item 78, page 23.

Rebuttal Testimony of
Randy S. Gross

1 Q. Was OPOWER in its infancy when Ameren was screening demand-side
2 programs?

3 A. No, as I previously explained it was not. In addition, there are documented
4 results for OPOWER programs of other utilities that have been independently verified.
5 OPOWER claims that over 85% of report recipients take significant action that results in
6 demand reductions of up to 3.5%, a 20% increase for other Energy Efficiency programs and
7 more than 200 Gigawatt Hours (GWh) savings for 2010.¹⁰ OPOWER indicates these results
8 have been verified by leading industry analysts and non-profit organizations, including the
9 American Council for an Energy-Efficient Economy (ACEEE), The Brattle Group, Navigant
10 Consulting, Power Systems Engineering, KEMA, Environmental Defense Fund (EDF), as
11 well as by established academics from several leading institutions and also claims to be
12 working with over 57 utilities in more than 10 million households nationwide.¹¹

13 Q. Does 4 CSR 240-22 require screening of customer education programs?

14 A. The version of 4 CSR 240-22 this matter is filed under does not explicitly
15 require screening of customer education programs. However, it does require in 4 CSR 240-
16 22.050(6) that the utility develop a set of potential demand-side programs that are designed to
17 deliver an appropriate selection of end-use measures to each market segment. Customer
18 education is an important part of all demand-side programs because it provides pertinent
19 information to a customer so they can make intelligent choices regarding their energy usage.

20 Q. Does Ameren Missouri provide any personalized customer education to its
21 customers?

¹⁰ Sandeep Menon OPOWER presentation, File No. EW-2009-0292, item 102.

¹¹ OPOWER website; <http://opower.com/>

Rebuttal Testimony of
Randy S. Gross

1 A. Yes, it does. Once a year Ameren Missouri sends each of its residential
2 customers a personal energy report that contains information about a customer's electric
3 energy usage and ways to reduce energy consumption.¹² Ameren Missouri also provides an
4 online tool called the "Energy Advisor".¹³ In a June 2, 2011 press release, Richard Mark,
5 senior vice president of Ameren Missouri Customer Operations stated "Ameren Missouri is
6 not only focused on providing the energy that powers people's lives and Missouri's economy,
7 but our employees are also prepared to offer guidance when customers need it to make
8 informed choices about their energy usage."¹⁴ Programs such as OPOWER take this type of
9 customer education to a higher level by applying behavioral science to optimize the program
10 results.¹⁵

11 Q. Do you have a recommendation for the Commission?

12 A. Yes. I recommend that the Commission find Ameren Missouri in non-
13 compliance with 4 CSR 240-22 and order Ameren Missouri to analyze a customer education
14 program such as OPOWER for its next annual update.

15 Q. Does this conclude your rebuttal testimony?

16 A. Yes, it does.

¹² <http://www.ameren.com/sites/auca/MyHome/ResEfficiency/Pages/PERFAQs.aspx>

¹³ <http://www.ameren.com/sites/aea/Pages/Home.aspx>

¹⁴ <http://ameren.mediaroom.com/index.php?s=43&item=943>

¹⁵ Sandeep Menon OPOWER presentation, File No. EW-2009-0292, item 102.